

ABSTRACT OF THE DISCLOSURE

A test medium and method for detecting, quantifying, identifying and differentiating up to four (4) separate biological materials in a test sample. A test medium is disclosed which allows quantifying and differentiating under ambient light aggregates of biological entities producing specific enzymes, which might include general coliforms, *E. coli*, *Aeromonas*, and *Salmonella* or *Shigella* in a single test medium. A new class of nonchromogenic substrate is disclosed which produce a substantially black, non-diffusible precipitate. This precipitate is not subject to interference from other chromogenic substrates present in the test medium. In a preferred form, the substrates are selected such that *E. coli* colonies present in the test medium show as substantially black, general coliforms colonies show in the test medium as a blue-violet color, *Aeromonas* colonies present in the test medium show as a generally red-pink color, and *Salmonella* or *Shigella* colonies show as a generally teal-green color. Other microorganisms and color possibilities for detection and quantification thereof are also disclosed. An inhibitor and method for making a test medium incorporating the inhibitor are disclosed.